

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P688812

Luminaire Tested: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2062.6 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

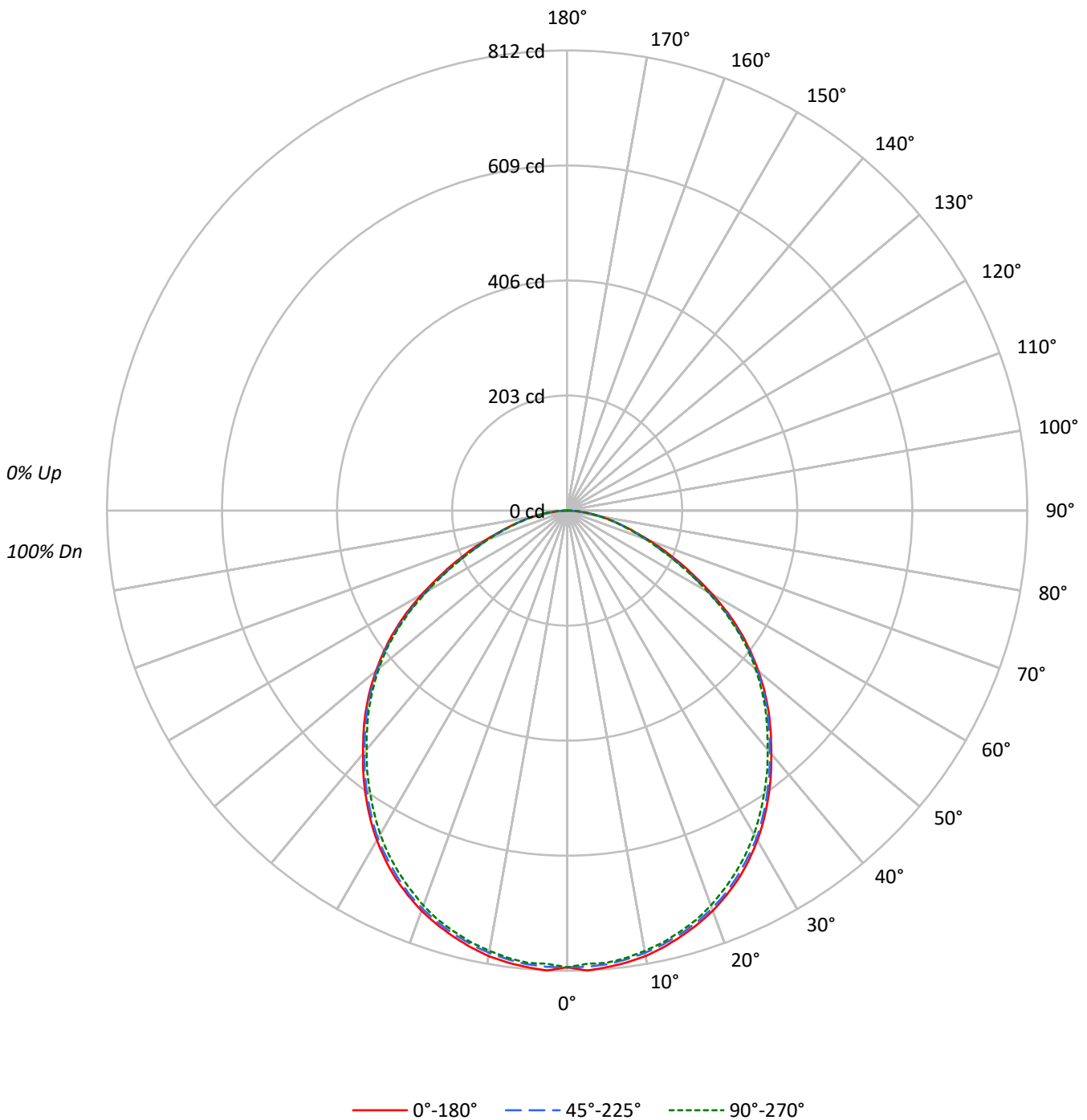
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688812

CATALOG NUMBER: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P688812

CATALOG NUMBER: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85				85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72				72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61				61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53				53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46				46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40				40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36				36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32				32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26				26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7759	7759	7759
5°	7815	7768	7741
10°	7802	7747	7713
15°	7751	7708	7667
20°	7699	7656	7598
25°	7608	7556	7480
30°	7467	7428	7334
35°	7271	7222	7130
40°	7039	6995	6915
45°	6847	6799	6731
50°	6601	6559	6496
55°	6259	6177	6130
60°	5697	5536	5509
65°	5021	4811	4795
70°	4335	4155	4155
75°	3731	3679	3627
80°	3288	3326	3249
85°	2574	2806	2806

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6847 cd/sqm

TEST NUMBER: P688812

CATALOG NUMBER: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	3.7
10°-20°	217.7	10.6
20°-30°	326.1	15.8
30°-40°	382.5	18.5
40°-50°	383.7	18.6
50°-60°	327.6	15.9
60°-70°	212.9	10.3
70°-80°	106.6	5.2
80°-90°	29.2	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	620.1	30.1
0°-40°	1002.6	48.6
0°-60°	1713.8	83.1
0°-90°	2062.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2062.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	809	801	804	801	801	77
15°	778	770	773	771	769	220
25°	716	708	711	705	704	330
35°	619	612	614	607	607	387
45°	503	499	499	494	494	387
55°	373	372	368	366	365	332
65°	220	216	211	210	210	220
75°	100	100	99	98	98	108
85°	23	25	25	25	25	28
90°	0	0	0	0	0	

TEST NUMBER: P688812

CATALOG NUMBER: SQ4R-PP3-050D-93050-1-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.9	805.9	805.9	805.9	805.9
2.5°	812.3	803.8	805.9	804.5	800.3
5°	808.7	801.0	803.8	801.0	801.0
7.5°	804.5	796.0	798.8	796.0	796.0
10°	798.1	789.7	792.5	789.7	789.0
12.5°	789.0	780.5	784.0	780.5	780.5
15°	777.7	769.9	773.4	770.6	769.2
17.5°	765.6	757.2	761.4	757.9	757.2
20°	751.5	743.0	747.3	741.6	741.6
22.5°	734.6	726.1	731.0	723.3	723.3
25°	716.2	707.7	711.3	704.9	704.2
27.5°	695.0	686.5	690.1	683.0	683.0
30°	671.7	663.9	668.2	660.4	659.7
32.5°	646.3	639.2	642.0	634.3	633.6
35°	618.7	612.4	614.5	607.4	606.7
37.5°	590.5	583.4	586.2	579.9	579.9
40°	560.1	555.9	556.6	551.6	550.2
42.5°	531.9	526.9	527.6	522.7	522.7
45°	502.9	499.4	499.4	494.4	494.4
47.5°	472.5	469.7	469.0	464.8	464.8
50°	440.7	438.6	437.9	434.4	433.7
52.5°	407.5	406.8	404.0	401.2	401.2
55°	372.9	371.5	368.0	365.9	365.2
57.5°	336.2	333.4	329.8	326.3	327.0
60°	295.9	293.1	287.5	286.1	286.1
62.5°	257.1	253.6	247.9	245.8	247.2
65°	220.4	216.1	211.2	209.8	210.5
67.5°	186.5	182.2	176.6	176.6	175.9
70°	154.0	151.9	147.6	147.6	147.6
72.5°	125.0	124.3	121.5	121.5	120.8
75°	100.3	100.3	98.9	98.2	97.5
77.5°	79.1	79.1	78.4	77.7	76.3
80°	59.3	60.7	60.0	59.3	58.6
82.5°	41.0	42.4	42.4	41.0	41.0
85°	23.3	25.4	25.4	25.4	25.4
87.5°	7.8	10.6	11.3	11.3	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)